

IN THE CLAIMS:

Please find below a listing of all pending claims. The statuses of the claims are set forth in parentheses. For those currently amended claims, underlined emphasis indicates insertions and ~~striketrough~~ emphasis (and/or double brackets) indicates deletions.

Please AMEND the claims according to the following:

1. (currently amended) A name/address translation device apparatus disposed between a global IP (internet protocol) address network and a private IP address network, comprising:

a unit to receive a query about an IP (internet protocol) address corresponding to a name of a communication destination from a communication source;

~~an identifying unit configured to identify, when a query about an address corresponding to a name of a communication destination is received from a communication source, which of a private network address and a global network address a source address of the communication source is and which of a private network address and a global network address a destination address of the communication destination is~~ that the communication source of the query belongs to either the private IP address network or the global IP address network based on a source IP address of the query, and to identify that a communication destination belongs to either the private IP address network or the global IP address network based on the name of the communication destination included in the query;

a first database used for searching for a private IP address corresponding to the name of the communication destination;

a second database used for searching for a global IP address corresponding to the name of the communication destination;

a judging unit configured to judge a combination of network types to which the communication source and the communication destination respectively belong, based on a result results of identification by the identifying unit, ~~whether or not to allow to~~ give a response including the address corresponding to the name of the communication destination to the communication source of the query; and

a searching unit to search for the private IP address corresponding to the name of the communication destination by using the first database if both of the communication source and the communication destination belong to the private IP address network, to search for the global IP address corresponding to the name of the communication destination by using the second database if both of the communication source and the communication destination belong to the global IP address network, to refuse the query if the communication source belongs to the global IP address network and the communication destination belongs to the private IP address network, and to search for the global IP address corresponding to the name of the communication destination by using the second database if the communication source belongs to the private IP address network and the communication destination belongs to the global IP address network; and

a sending unit configured to send the response the communication source the global IP address or the private IP address as a response to the query if the global IP address or the private IP address is obtained by the searching unit when the judging unit judges that it is allowable to give the response.

2. (canceled)

3. (currently amended) The name/address translation device according to claim 21, wherein the sending unit ~~further configured to~~ invalidates sending the response if there is no application of which a use is permitted in a communication between the

communication source and the communication destination when the identifying unit identifies that the communication source belongs to the private IP address network and the communication destination belongs to the global IP address network.

4. (currently amended) The name/address translation device according to claim 21, further comprising:

a notifying unit ~~configured to notify~~, when a response containing the global IP address of a second terminal corresponding to the communication destination belonging to the global IP address network is given to a first terminal corresponding to the communication source belonging to the private IP address network, a routing device of passage information for letting a data pass through that are forwarded between the first terminal and the second terminal, the routing device receiving the data forwarded between the private IP address network and the global IP address network and letting only the data with its passage permitted pass through, and the routing device effecting an address translation between the private IP address network and the global IP address network.

5. (currently amended) The name/address translation device according to claim 4,

wherein the notifying unit ~~further configured to notify~~ notifies the routing device of passage information containing a first network address used in the private IP address network that is virtually assigned to the second terminal and a second network address that the second terminal uses on the global IP address network, so that the routing device translates, when a data transmitted from the second terminal passes through, the second network address as a source address included in the data into the first network address, and

wherein the sending unit ~~further configured to send~~ sends a response containing the first network address so that the first terminal adds, to a data addressed to the

second terminal, the first network address as a destination address, and that the routing device translates, when the data addressed to the second terminal passes through, the first network address to the data as the destination address into the second network address assigned to the second terminal.

6. (currently amended) The name/address translation device according to claim 4, wherein the notifying unit ~~further configured to notify~~ notifies the routing device of the passage information further containing information about an application of which the utilization is permitted in the communication between the first terminal and the second terminal in order for the routing device to let only the data pass through which is based on the application of which the utilization is permitted between the first terminal and the second terminal.

7. (currently amended) The name/address translation device according to claim 4, wherein the notifying unit ~~further configured to notify~~ notifies, before the sending unit sends the address of the second terminal, the routing device of the passage information.

8. (currently amended) A name/address translation method executed by a name / address translation apparatus disposed between a global IP (internet protocol) address network and a private IP address network, comprising:

receiving a query about an IP (internet protocol) address corresponding to a name of a communication destination from a communication source;

identifying, when a query about an address corresponding to a name of a communication destination is received from a communication source, which of a private network address and a global network address a source address of the communication source is and which of a private network address and a global network address a

destination address of the communication destination is that the communication source of the query belongs to either the private IP address network or the global IP address network based on a source IP address of the query, and identifying that a communication destination belongs to either the private IP address network or the global IP address network based on the name of the communication destination included in the query;

judging a combination of network types to which the communication source and the communication destination respectively belong, based on a result results of identification by the identifying, whether or not to allow to give a response including the address corresponding to the name of the communication destination to the communication source of the query; and

searching for the private IP address network corresponding to the name of the communication destination by using a first database, which is used for searching for a private IP address corresponding to the name of the communication destination, if both of the communication source and the communication destination belong to the private IP address network;

searching for the global IP address corresponding to the name of the communication destination by using a second database, which is used for searching for the global IP address corresponding to the name of the communication destination, if both of the communication source and the communication destination belong to the global IP address network;

refusing the query if the communication source belongs to the global IP address network and the communication destination belongs to the private IP address network;

searching for the global IP address corresponding to the name of the communication destination by using the second database if the communication source belongs to the private IP address network and the communication destination belongs to the global IP address network; and

~~sending the response the communication source the global IP address or the private IP address as a response to the query if the global IP address or the private IP address is obtained when the judging unit judges that it is allowable to give the response.~~

9. (canceled)

10. (currently amended) The name/address translation method according to claim 9, wherein the sending includes invalidating sending the response if there is no application of which a use is permitted in a communication between the communication source and the communication destination when it is identified in the identifying step that the communication source belongs to the global IP address network and the communication destination belongs to the private IP address network.

11. (currently amended) The name/address translation method according to claim 9, further comprising:

notifying, when a response containing the address of a second terminal corresponding to the communication destination belonging to the global IP address network is given to a first terminal corresponding to the communication source belonging to the private IP address network, a routing device of passage information for letting a data pass through that are forwarded between the first terminal and the second terminal, the routing device receiving the data forwarded between the private IP address network and the global IP address network and letting only the data with its passage permitted pass through, and the routing device effecting an address translation between the private IP address network and the global IP address network.

12. (currently amended) The name/address translation method according to claim 11,

wherein the notifying includes notifying the routing device of passage information containing a first network address used in the private IP address network that is virtually assigned to the second terminal and a second network address that the second terminal uses on the global IP address network, so that the routing device translates, when a data transmitted from the second terminal passes through, the second network address as a source address included in the data into the first network address, and

wherein the sending includes sending a response containing the first network address so that the first terminal adds, to a data addressed to the second terminal, the first network address as a destination address, and that the routing device translates, when the data addressed to the second terminal passes through, the first network address added to the data as the destination address into the second network address assigned to the second terminal.

13. (previously presented) The name/address translation method according to claim 11,

wherein the notifying includes notifying the routing device of the passage information further containing information about an application of which the utilization is permitted in the communication between the first terminal and the second terminal in order for the routing device to let only the data pass through which is based on the application of which the utilization is permitted between the first terminal and the second terminal.

14. (previously presented) The name/address translation method according to claim 11,

wherein the notifying includes notifying, before the address of the second terminal is sent in the sending, the routing device of the passage information.

15. (currently amended) A computer-readable medium encoded with a program for making a computer execute a method comprising:

identifying, when a query about an address corresponding to a name of a communication destination is received from a communication source, which of a private network address and a global network address a source address of the communication source is and which of a private network address and a global network address a destination address of the communication destination is that the communication source of the query belongs to either the private IP address network or the global IP address network based on a source IP address of the query, and identifying that a communication destination belongs to either the private IP address network or the global IP address network based on the name of the communication destination included in the query;

judging a combination of network types to which the communication source and the communication destination respectively belong, based on a result results of identification by the identifying, whether or not to allow to give a response including the address corresponding to the name of the communication destination to the communication source of the query; and

searching for the private IP address network corresponding to the name of the communication destination by using a first database, which is used for searching for a private IP address corresponding to the name of the communication destination, if both of the communication source and the communication destination belong to the private IP address network;

searching for the global IP address corresponding to the name of the communication destination by using a second database, which is used for searching for the global IP address corresponding to the name of the communication destination, if both of the communication source and the communication destination belong to the global IP address network;

refusing the query if the communication source belongs to the global IP address network and the communication destination belongs to the private IP address network; searching for the global IP address corresponding to the name of the communication destination by using the second database if the communication source belongs to the private IP address network and the communication destination belongs to the global IP address network; and

sending the response the communication source the global IP address or the private IP address as a response to the query if the global IP address or the private IP address is obtained when the judging unit judges that it is allowable to give the response.

16. (canceled)

17. (currently amended) The computer-readable medium according to claim 16, wherein the sending includes invalidating sending the response if there is no application of which a use is permitted in a communication between the communication source and the communication destination when it is identified in the identifying step that the communication source belongs to the private IP address network and the communication destination belongs to the global IP address network.

18. (currently amended) The computer-readable medium according to claim 16, wherein the method further comprising:

notifying, when a response containing the address of a second terminal corresponding to the communication destination belonging to the global IP address network is given to a first terminal corresponding to the communication source belonging to the private IP address network, a routing device of passage information for letting a data pass through that are forwarded between the first terminal and the

second terminal, the routing device receiving the data forwarded between the private IP address network and the global IP address network and letting only the data with its passage permitted pass through, and the routing device effecting an address translation between the private IP address network and the global IP address network.

19. (currently amended) The computer-readable medium according to claim 18, wherein the notifying includes notifying the routing device of passage information containing an first network address used in the private IP address network that is virtually assigned to the second terminal and an second network address that the second terminal uses in the global IP address network so that the routing device translates, when a data transmitted from the second terminal passes through, the second network address as a source address included in the data into an the first network address, and

wherein the sending includes sending a response containing the first network address so that the first terminal adds, to a data addressed to the second terminal, the first network address as a destination address, and that the routing device translates, when the data addressed to the second terminal passes through, the first network address added to the data as the destination address into the second network address assigned to the second terminal.

20. (previously presented) The computer-readable medium according to claim 18, wherein the notifying includes notifying the routing device of the passage information further containing information about an application of which the utilization is permitted in the communication between the first terminal and the second terminal in order for the routing device to let only the data pass through which is based on the application of which the utilization is permitted between the first terminal and the second terminal.

21. (previously presented) The computer-readable medium according to claim 18, wherein the notifying includes notifying, before sending the address of the second terminal in the sending, the routing device of the passage information.